



AST-SUB10S

SUBWOOFER USER MANUAL

Part # 8100.0307

WARNING

- TO PREVENT FIRE OR SHOCK HAZARD, DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.
- TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.
- TO PREVENT ELECTRICAL SHOCK, MATCH WIDE BLADE PLUG TO WIDE SLOT, FULLY INSERT.



This lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

CAUTION

RISK OF ELECTRIC SHOCK DO NOT OPEN

Warning: To reduce the risk of electric shock, do not remove cover (or back) no user serviceable parts inside. Refer servicing to qualified service personnel.



The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

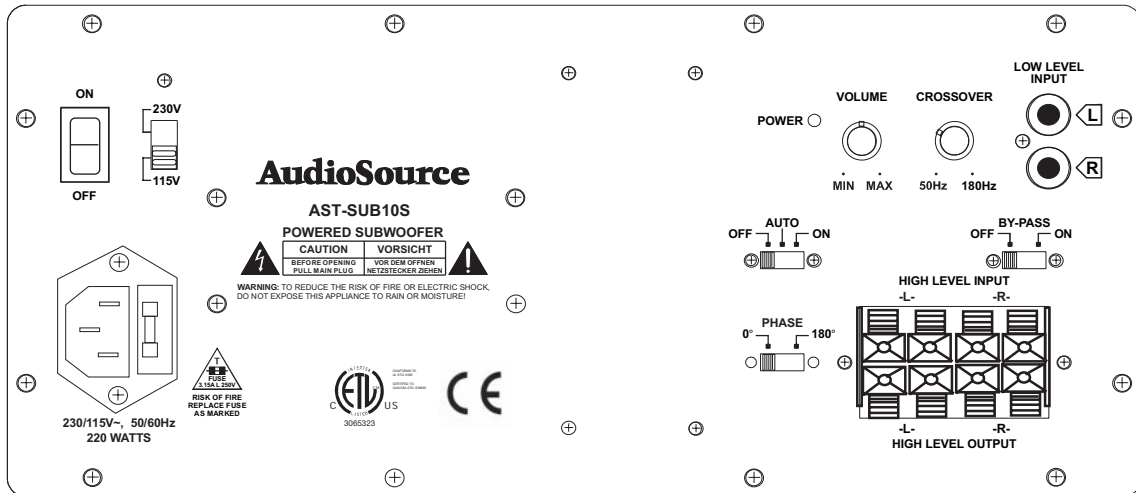
IMPORTANT SAFETY INSTRUCTIONS

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with damp cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near heat sources such as radiators, heat registers, stoves, or other apparatus (Including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at the plugs, convenience receptacles, and at the point where they exit from the appliance.
11. Only use attachments or accessories specified by the manufacturer.
12. Use only with a cart, stand, tripod or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip over.
13. Unplug the apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified personnel. Servicing is required when the apparatus has been damaged in any way, such as power supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.



This appliance shall not be exposed to dripping or splashing water and no object filled with liquids such as vases shall be placed on apparatus.

AST SUB10S Subwoofer Amplifier Panel



Package Contents:

- 1) 1 - AST SUB10S Amplified Subwoofer
- 2) 1 - 3 Prong Grounded AC Cord
- 3) 1 - Owner's / Operational manual
- 4) 4 - Mounting Feet with 1/4" threaded screw and locking hex nut.
- 5) 4 - Insulator / Cushion for mounting feet



Removal and Setup

Open the carton and remove foam protective packing from top of package. Remove accessory package. Make sure to locate and store the Owner's Manual in a convenient location; this will be needed for operation, and subwoofer setup. Carefully remove AST SUB10S subwoofer from the factory carton and remove from protective plastic bag. Make sure not to scratch or otherwise physically damage your new subwoofer.

To install feet: make sure the feet (4) have provided locking hex nuts (4) threaded to feet prior to installation. Carefully turn the subwoofer over on a side or upside down resting on its top. This is best done on carpet or other non-abrasive soft surface. Install threaded feet into 1/4" receptacle and rotate clockwise until screws tighten and feet are in place. If necessary, use provided cushions for the feet to prevent scratching any floor or furniture surfaces (i.e.: hardwood, tile, vinyl / linoleum, or other soft surfaces). Rotate or set subwoofer onto floor making sure all feet (4) are secure and make good contact with the flooring surface. The subwoofer may be leveled by adjusting the feet individually. Secure the feet in position with locking the nuts.

To install power cord: remove power cord from the accessory package and undo cord tie to allow full power cord length. Install cord into AC receptacle on rear panel of subwoofer. You are now ready to read the operational and hookup information in the provided Owner's Manual.

Do not attempt to power up or operate the subwoofer until Owner's Manual has been read, consulted, and installation is completed.

Placement Guidelines

Prior to installing your new subwoofer, please consider the following guidelines. Placing the subwoofer near a wall or in a corner will greatly increase the overall bass response. As the frequencies reproduced by subwoofers are long and need room to propagate, a subwoofer placed away from a wall or corner will not sound as full as when placed in close proximity to walls or corners. Placing close to a wall or corner will enhance the projection of the omni-directional bass signal throughout a listening environment.

The subwoofer cabinet is designed to blend in and enhance most home decors. The slim, low profile design of the AST SUB10S subwoofer is intended to fit in any room or within normal interior design / furniture applications. If you decide to place anything directly atop your subwoofer, please use great caution as the speaker cabinet will vibrate and items placed on or near the subwoofer may shake loose or fall. To avoid electric shock and possible damage never place anything atop the subwoofer that contains water or liquid, such as a hot or cold drink, vase or flower pot.

Using the Controls

Power

There is one main power switch located directly above the AC power cord receptacle. This may be switched ON when necessary for use, and should be turned OFF when you plan to be away from home leaving the subwoofer unused or idle. Beneath the main volume control resides the auto off / on control switch. This switch can be set to three operating positions: ON, OFF, and AUTO. The AUTO position is the default setting. This keeps the subwoofer in standby mode (providing the main power switch is set to "ON"). Using sophisticated signal sensing circuitry, the amplifier is activated when a signal is detected at either of the inputs. If no signal is detected after several minutes, the amplifier switches back to the standby mode. In OFF mode the subwoofer will be inactive regardless of the main power switch setting. In ON mode the subwoofer will be on and active whenever the main power switch is set to the ON position.

Phase

The phase switch is located directly beneath the AUTO ON /OFF switch. The default setting for the phase switch is the 0° position. As the subwoofer is sometimes placed quite a distance from the other speakers, its sound may arrive at your ears milliseconds before or after the sound from your other speakers. In the very rare instances where the subwoofer is out of phase, the bass will appear somewhat hollow, and the level control may seem to have little or no effect. Setting the phase switch to the 180° position will compensate for these effects.

Note: Phase is relative, and can be different from location to location. Always return to the normal listening location to evaluate any setting for audible changes.

Level

Since your subwoofer is designed to work in conjunction with other speakers, a level control is provided that will allow you to balance the output of the subwoofer with the rest of your speakers. Once set, the level control should not require further adjustment. Begin with the level control at minimum position. Slowly increase the level clockwise until the subwoofer's output is equal to that of your other speakers.

Note:

Output level is relative and can be different from location to location . Always return to the normal listening location to evaluate any setting changes.

Crossover Frequency

The crossover frequency control is used to adjust the point at which the subwoofer stops reproducing the frequencies played by the other speakers in your system. Most home speakers will reproduce some bass signal, but depending on their specific type and size, the subwoofer enhances the lower frequency response of your system. The control is adjustable from 50Hz (very low cutoff) to 180Hz (high cutoff). Frequencies higher than the cut-off frequency will not be reproduced by the subwoofer. Raising the crossover setting increases the mid-bass frequencies that the subwoofer will reproduce. Lowering the crossover will do the opposite. We recommend starting at the 10 o'clock position and adjusting based on your speakers. Larger speakers will reproduce more of the lower frequencies, and you may set the crossover to below 100Hz. Smaller home speakers won't produce as much of the lower frequencies and the crossover may be set above the 100Hz setting. The higher the crossover frequency the more midrange bass will be reproduced. Only the lowest bass tones will be reproduced as the crossover frequency is reduced. If the receiver or source component is a Dolby Digital™ unit, the ideal crossover setting may be around 100Hz. If the audio source is a THX™ rated device an optimal crossover setting may be around 80Hz.

Note: Bass is relative to the overall output of a speaker system and is subjective to the listener's ear. Set the crossover frequencies to a level that sounds pleasing to your ear and the overall reproduction of your audio.

By-Pass Switch

The by-pass switch is set depending on which type of input source will be used. When using the High Level Input the by-pass switch should be set to the "OFF" position. This will allow use of the crossover control to determine the frequency of the subwoofer output. When the Line Level Input (also described as RCA in) is being used, the type of input source must be determined prior to setting the by-pass switch. The by-pass switch should be set to the "ON" position only if a dedicated subwoofer output or LFE output is used. The "ON" position of the by-pass switch will disable the internal crossover. If a non-LFE or non-dedicated subwoofer output is used for the Line Level Input, the bypass switch should be set to the "OFF" position to allow proper use of the crossover control.

Connecting the AST SUB10S

General Information

Signals input to your subwoofer will first pass through the crossover. The portion of the signal below the current crossover frequency setting will be reproduced by the subwoofer. The unprocessed signal will also be passed to the High Level outputs.

High Level Input

These inputs are designed to accept a full band amplified signal from the speaker outputs of a receiver, power amp, or other device not equipped with line level outputs. Connect the speaker wires from the output of the amplified audio source via standard speaker wire to the inputs of the High Level Input.

High Level Output

The original amplified signal from your audio source is present at these outputs when using the High Level Input as the audio source. Connect speaker wires from the High Level Output (never more than one wire per terminal connection) to a pair of audio speakers.

Low Level Input

These RCA jacks are designed to accept a dedicated subwoofer output, a LFE line level signal, or a standard line level signal from a receiver, pre-amp, surround sound decoder or similar device. When using a single line level output from an audio source, connection to either the Left or Right input is sufficient. If your audio component has line level stereo outputs then connect both RCA line level outputs to the Left and Right Low level Input.

Limited Warranty

Phoenix Gold International, Inc. warrants this product against defects in materials and workmanship for a limited period of time. For a period of five (5) years from date of original purchase for loudspeakers and one (1) year for electronics such as those in powered speakers. We will repair or replace the product, at our option, without charge for parts. Customer must pay for all labor charges associated with the removal and re-installation of speakers for the limited period and all parts and labor charges after the limited warranty period expires. The limited warranty period for factory refurbished products expires after ninety (90) days from date of original purchase. This limited warranty applies only to purchases from authorized Phoenix Gold Retailers or Distributors. This limited warranty is extended only to the original purchaser and is valid only to consumers in the United States.

Consumers are required to provide a copy of the original sales invoice from an authorized Phoenix Gold Retailer or Distributor when making a claim against this limited warranty. This limited warranty only covers failures due to defects in materials or workmanship that occur during normal use. It does not cover failures resulting from accident, fire, flood, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, modification, service by anyone other than Phoenix Gold, or damage that is attributable to Acts of God. It does not cover costs of transportation to Phoenix Gold or damage in transit. The customer should return their defective product, freight prepaid and insured, to Phoenix Gold International, Inc. only after receiving a Return Authorization.

Repair or replacement under the terms of this warranty does not extend the term of this warranty. Should a product prove to be defective in workmanship or material, the consumer's sole remedies will be repair or replacement as provided under the terms of this warranty. If the defective product is discontinued Phoenix Gold International, Inc. may replace the product with an equivalent or superior product at its option. Any cost of re-installation or repair of wall or ceiling surface is the sole responsibility of the customer and that cost shall not be the responsibility of Phoenix Gold International, Inc. Under no circumstances shall Phoenix Gold be liable for loss or damage, direct, consequential or incidental, arising out of the use of or inability to use the product. There are no express warranties other than described above.



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Specifications

Woofer:	10" Aluminum cone with foam surround
Frequency Response:	30Hz to 180Hz
Sensitivity (1W / 1Meter):	88dB
Impedance:	4 Ohm
Power Output:	150 Watts (Peak)

Features

- Auto-Power ON-OFF with LED Indicator
- Level Control
- Crossover Frequency Control
- Line Level Input
- Speaker Level Input
- Crossover ByPass for use with LFE Input